

## **2016 Massachusetts HIV/AIDS Epidemiologic Profile Detailed Data Tables: Adolescents and Young Adults**

### Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease and Laboratory Sciences, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2016, this resulted in the removal of 4,913 HIV/AIDS cases, of which 1,099 have died and 3,814 were living. These persons living with HIV infection may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV infection, regardless of location at diagnosis, is the basis for MDPH service planning. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual risk category was used with the intention of identifying HIV risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. The rationale for the application of the presumed heterosexual risk category to women only has been addressed in the MDPH Office of HIV/AIDS report "Intersecting Risks: HIV Infection among Heterosexual Women and Men in Massachusetts." (2010) <a href="https://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting\_risks.pdf">https://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting\_risks.pdf</a>. The CDC reports men diagnosed with HIV infection who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual risk categories for women.

Table 1. Number and percentage distribution of people diagnosed with HIV infection by age at diagnosis: Massachusetts<sup>1</sup>, 2005–2014<sup>2</sup>

	<	13	13-	-19	20	<b>–24</b>	25	-29	30	<b>-</b> 34	35	-39	40	<b>-44</b>	45	<b>-</b> 49	50	<b>-</b> 54	55	-59	6	0+	Total
Year	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2005	5	1%	9	1%	60	7%	92	10%	146	16%	153	17%	191	21%	130	14%	64	7%	37	4%	26	3%	913
2005	5	1%	20	2%	66	7 % 8%	90	11%	102	12%	145	17%	149	18%	121	15%	65	7 % 8%	41	4 % 5%	25	3%	829
2007	4	1%	13	2%	55	7%	85	11%	89	12%	136	18%	129	17%	118	15%	65	9%	35	5%	33	4%	762
2008	6	1%	20	3%	59	8%	105	14%	89	12%	83	11%	124	17%	106	14%	75	10%	43	6%	36	5%	746
2009	3	0%	20	3%	63	9%	71	10%	97	14%	92	13%	112	16%	116	16%	66	9%	37	5%	37	5%	714
2010	6	1%	12	2%	65	9%	70	10%	88	12%	111	16%	97	14%	106	15%	76	11%	45	6%	34	5%	710
2011	4	1%	25	4%	70	10%	73	11%	88	13%	91	13%	112	16%	96	14%	60	9%	35	5%	38	5%	692
2012	2	0%	23	3%	80	11%	99	14%	98	14%	80	11%	85	12%	103	14%	64	9%	45	6%	40	6%	719
2013	2	0%	16	2%	79	12%	101	15%	88	13%	53	8%	74	11%	106	16%	79	12%	46	7%	35	5%	679
2014	3	0%	16	3%	80	13%	91	14%	86	14%	65	10%	68	11%	86	14%	59	9%	33	5%	42	7%	629

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data are current as of 3/1/16 and may be subject to change

Table 2. Number and percentage distribution of men diagnosed with HIV infection by age at diagnosis: Massachusetts<sup>1</sup>, 2005–2014<sup>2</sup>

	<	13	13-	-19	20	-24	25	<b>–29</b>	30	-34	35	-39	40-	-44	45	-49	50	-54	55-	-59	6	0+	Total
Year	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2005	0	0%	5	1%	40	6%	68	10%	103	16%	113	17%	146	22%	100	15%	46	7%	26	4%	16	2%	663
2005	3	1%	10	2%	44	7%	59	10%	73	12%	111	19%	111	19%	88	15%	51	9%	26	4 % 4%	19	2 % 3%	595
2007	1	0%	6	1%	40	7%	61	11%	57	10%	103	19%	94	17%	84	15%	52	10%	24	4%	22	4%	544
2008	6	1%	14	3%	48	9%	74	14%	60	11%	57	10%	91	17%	82	15%	54	10%	31	6%	27	5%	544
2009	1	0%	15	3%	53	10%	58	11%	69	13%	70	13%	84	15%	96	18%	47	9%	25	5%	27	5%	545
2010	3	1%	7	1%	48	10%	52	10%	58	12%	75	15%	73	15%	83	17%	56	11%	25	5%	22	4%	502
2011	2	0%	15	3%	59	12%	57	11%	55	11%	64	13%	84	17%	70	14%	43	9%	24	5%	24	5%	497
2012	1	0%	15	3%	68	13%	82	16%	62	12%	55	10%	65	12%	75	14%	46	9%	35	7%	21	4%	525
2013	1	0%	7	1%	63	12%	81	16%	67	13%	38	7%	58	11%	82	16%	58	11%	30	6%	25	5%	510
2014	2	0%	12	3%	67	14%	73	15%	65	14%	47	10%	50	11%	68	14%	44	9%	18	4%	29	6%	475

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data are current as of 3/1/16 and may be subject to change

Table 3. Number and percentage distribution of women diagnosed with HIV infection by age at diagnosis: Massachusetts<sup>1</sup>, 2005–2014<sup>2</sup>

	<	13	13-	-19	20-	-24	25	<b>–29</b>	30	-34	35	<b>–39</b>	40	<b>–</b> 44	45	<b>–49</b>	50	<b>-54</b>	55	<b>–</b> 59	6	0+	Total
Year	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2005	5	2%	4	2%	20	8%	24	10%	43	17%	40	16%	45	18%	30	12%	18	7%	11	4%	10	4%	250
2006	2	1%	10	4%	22	9%	31	13%	29	12%	34	15%	38	16%	33	14%	14	6%	15	6%	6	3%	234
2007	3	1%	7	3%	15	7%	24	11%	32	15%	33	15%	35	16%	34	16%	13	6%	11	5%	11	5%	218
2008	0	0%	6	3%	11	5%	31	15%	29	14%	26	13%	33	16%	24	12%	21	10%	12	6%	9	4%	202
2009	2	1%	5	3%	10	6%	13	8%	28	17%	22	13%	28	17%	20	12%	19	11%	12	7%	10	6%	169
2010	3	1%	5	2%	17	8%	18	9%	30	14%	36	17%	24	12%	23	11%	20	10%	20	10%	12	6%	208
2011	2	1%	10	5%	11	6%	16	8%	33	17%	27	14%	28	14%	26	13%	17	9%	11	6%	14	7%	195
2012	1	1%	8	4%	12	6%	17	9%	36	19%	25	13%	20	10%	28	14%	18	9%	10	5%	19	10%	194
2013	1	1%	9	5%	16	9%	20	12%	21	12%	15	9%	16	9%	24	14%	21	12%	16	9%	10	6%	169
2014	1	1%	4	3%	13	8%	18	12%	21	14%	18	12%	18	12%	18	12%	15	10%	15	10%	13	8%	154

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data are current as of 3/1/16 and may be subject to change

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Table 4. Number and percentage distribution of people living with HIV infection on December 31, 2015 by age at HIV infection diagnosis: Massachusetts<sup>1</sup>

Age (years)	N	%
Under 13	24	<1%
13 to 19	76	<1%
20 to 24	298	1%
25 to 29	693	3%
30 to 34	949	5%
35 to 39	1,354	7%
40 to 44	1,764	9%
45 to 49	3,009	15%
50 to 54	4,142	20%
55 to 59	3,609	18%
60+	4,354	21%
Total	20,272	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 5. Number and percentage distribution of people living with HIV infection on December 31, 2015 by current age and sex at birth: Massachusetts<sup>1</sup>

	Men	1	Wome	en	State T	otal
Age in years	N	%	N	%	N	%
Under 13	13	<1%	11	<1%	24	<1%
13 to 19	43	<1%	33	1%	76	<1%
20 to 24	194	1%	104	2%	298	1%
25 to 29	510	4%	183	3%	693	3%
30 to 34	700	5%	249	4%	949	5%
35 to 39	847	6%	507	9%	1,354	7%
40 to 44	1,118	8%	646	11%	1,764	9%
45 to 49	2,048	14%	961	16%	3,009	15%
50 to 54	3,004	21%	1,138	20%	4,142	20%
55 to 59	2,693	19%	916	16%	3,609	18%
60+	3,269	23%	1,085	19%	4,354	21%
Total	14,439	100%	5,833	100%	20,272	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data are current as of 3/1/16 and may be subject to change

Table 6. Number and percentage distribution of people diagnosed with HIV by age at diagnosis and exposure mode: Massachusetts<sup>1</sup>, 2012–2014<sup>2</sup>

	Age at Diagnosis (years)									
	13-	-19	20-	-24	13-	-24	25	+		
By Exposure Mode:	N	%	N	%	N	%	N	%		
Male-to-Male Sex (MSM)	24	44%	160	67%	184	63%	736	43%		
Injection Drug Use (IDU)	0	0%	7	3%	7	2%	98	6%		
MSM/IDU	<sup>6</sup>	<b></b> <sup>6</sup>	5	2%	6	2%	45	3%		
Total Heterosexual Sex (HTSX)	<b></b> <sup>6</sup>	<b></b> <sup>6</sup>	10	4%	14	5%	137	8%		
HTSX w/ an Injection Drug User	<sup>6</sup>	6	<u></u> 6	6	<sup>6</sup>	<u></u> 6	30	2%		
HTSX w/ Bisexual men (women only)	<u></u> 6	<u></u> 6	<u></u> 6	<u></u> 6	<u></u> 6	<sup>6</sup>	2	0%		
• Other HTSX <sup>3</sup>	<sup>6</sup>	6 6	6	6	0	0%	1	0%		
HTSX w/ a person w/ HIV or AIDS	0		9	4%	13	4%	104	6%		
Blood/Blood Products	0	0%	<sup>6</sup>	<b></b> <sup>6</sup>	<sup>6</sup>	<b></b> 6	0	0%		
Pediatric	<b></b> 6	<b></b> <sup>6</sup>	<b></b> 6	<b></b> 6	<b></b> 6	<b></b> <sup>6</sup>	0	0%		
Total Undetermined/Other	25	45%	54	23%	79	27%	710	41%		
Presumed HTSX <sup>4</sup>	13	24%	20	8%	33	11%	243	14%		
<ul> <li>Undetermined/Other<sup>5</sup></li> </ul>	12	22%	34	14%	46	16%	467	27%		
Total <sup>7</sup>	55	100%	239	100%	294	100%	1,726	100%		

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

diagnosed in another state before being diagnosed and reported in Massachusetts.

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Includes heterosexual sex with a person who received blood/blood products.

<sup>&</sup>lt;sup>4</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>5</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>6</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>7</sup> Total includes numbers suppressed for the assurance of confidentiality.

Table 7. Number and percentage distribution of people living with HIV infection on December 31, 2015, current age by exposure mode: Massachusetts<sup>1</sup>

Age on December 31, 2015 (years)

	13-	-19	20-	-24	13-	-24	25	+
By Exposure Mode:	N	%	N	%	N	%	N	%
Male-to-Male Sex (MSM)	5	5	100	34%	104	28%	7,579	38%
Injection Drug Use (IDU)	0	0%	<sup>5</sup>	<sup>5</sup>	<sup>5</sup>	5	3,557	18%
MSM/IDU	0	0%	6	2%	6	2%	695	3%
Total Heterosexual Sex (HTSX)	0	0%	8	3%	8		2,811	14%
HTSX w/ an Injection Drug User	0	0%	0	0%	0	0%	891	4%
<ul> <li>HTSX w/ Bisexual men (women only)</li> </ul>	0	0%	0	0%	0	0%	44	<1%
Other HTSX <sup>2</sup>	0	0%	0	0%	0	0%	49	<1%
<ul> <li>HTSX w/ a person w/ HIV or AIDS</li> </ul>	0	0%	8	3%	8	2%	1,827	9%
Blood/Blood Products	<b></b> 5	<b></b> <sup>5</sup>	64	<1%				
Pediatric	62	82%	107	36%	169	45%	155	1%
Total Undetermined	10	13%	74	25%	84	22%	5,013	25%
Presumed HTSX <sup>3</sup>	<u></u> 5	5	29	10%	32	9%	1,862	9%
Undetermined <sup>4</sup>	5	<u></u> 5	45	15%	52	14%	3,151	16%
Total <sup>6</sup>	76	100%	298	100%	374	100%	19,874	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

# Table 8. Number and percentage distribution of people living with HIV infection who were exposed to HIV infection perinatally, or through other means before age 13 (years), by age on December 31, 2015<sup>1</sup>

Age:	N	%
Less than 13	24	7%
13–19	62	18%
20–24	106	31%
25 and over	148	44%
Total	340	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

<sup>&</sup>lt;sup>2</sup> Includes heterosexual sex with a person who received blood/blood products.

<sup>&</sup>lt;sup>3</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>4</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>5</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>6</sup> Total includes numbers suppressed for the assurance of confidentiality.

Table 9. Number and percentage distribution of adolescents and young adults 13-24 years old on December 31, 2015, who were exposed to HIV infection perinatally, or through other means before age 13, by sex at birth and race/ethnicity<sup>1</sup>

Sex at Birth:	N	%
Men Women	92 76	55% 45%
Race/Ethnicity:	N	%
White (non-Hispanic) Black (non-Hispanic) Hispanic/Latino Total <sup>2</sup>	36 76 51 <b>168</b>	21% 45% 30% <b>100%</b>

Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts. <sup>2</sup> Total includes Other/Undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 10. Number and percentage distribution of people diagnosed with HIV infection between 13–24 years of age, sex at birth by race/ethnicity and exposure mode: Massachusetts<sup>1</sup>, 2012–2014<sup>2</sup>

	Men		Women	1
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	78	34%	18	29%
Black (non-Hispanic)	70 57	25%	28	45%
Hispanic/Latino	87	38%	14	23%
Asian/Pacific Islander	<sup>7</sup>	7	<sup>7</sup>	
Other/Unknown	<b></b> <sup>7</sup>	<b></b> <sup>7</sup>	<b></b> <sup>7</sup>	<b></b> <sup>7</sup>
Exposure Mode:	N	%	N	%
Male-to-Male Sex (MSM)	18 <u>4</u>	79%	N/A	N/A
Injection Drug Use (IDU)	<b></b> ′	'	5	8%
MSM/IDU	6	3%	N/A	N/A
Heterosexual sex (HTSX)	<b></b> <sup>7</sup>	<b></b> <sup>7</sup>	13	21%
Total Undetermined	35	15%	44	71%
Presumed HTSX <sup>4</sup>	N/A	N/A	33	53%
<ul> <li>Undetermined<sup>5</sup></li> </ul>	35	15%	11	18%
Total <sup>6</sup>	232	100%	62	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> N/A = Not Applicable

<sup>&</sup>lt;sup>4</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>5</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>6</sup> Total includes blood/blood product exposure modes and suppressed numbers.

<sup>&</sup>lt;sup>7</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 11. Number and percentage distribution of people diagnosed with HIV infection at 25 years of age and older, sex at birth by race/ethnicity and exposure mode: Massachusetts<sup>1</sup>, 2012–2014<sup>2</sup>

	Men		Womer	1
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	571	45%	77	17%
Black (non-Hispanic)	283	22%	239	53%
Hispanic/Latino	358	28%	121	27%
Asian/Pacific Islander	52	4%	<b></b> <sup>7</sup>	<b></b> <sup>7</sup>
Other/Unknown	10	1%	7	<b></b> <sup>7</sup>
Exposure Mode:	N	%	N	%
Male-to-Male Sex (MSM)	736	58%	N/A <sup>3</sup>	N/A
Injection Drug Use (IDU)	60	5%	38	8%
MSM/IDU	45	4%	N/A	N/A
Heterosexual sex (HTSX)	55	4%	82	18%
Total Undetermined	378	30%	332	73%
Presumed HTSX <sup>4</sup>	N/A	N/A	243	54%
<ul> <li>Undetermined<sup>5</sup></li> </ul>	378	30%	89	20%
Total <sup>6</sup>	1,274	100%	452	100%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> N/A = Not Applicable

<sup>&</sup>lt;sup>4</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>5</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>6</sup> Total includes blood/blood product exposure modes and suppressed numbers.

<sup>&</sup>lt;sup>7</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 12. Number and percentage distribution of people living with HIV infection on December 31, 2015 between 13-24 years of age, sex at birth by race/ethnicity and exposure mode: Massachusetts<sup>1</sup>

	Men		Women	1
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	46	19%	29	21%
Black (non-Hispanic)	94	40%	62	45%
Hispanic/Latino	89	38%	40	29%
Asian/Pacific Islander	6	<b></b> <sup>6</sup>	<b></b> <sup>6</sup>	<sup>6</sup>
Other/Unknown	6	6	<b></b> <sup>6</sup>	<b></b> <sup>6</sup>
Exposure Mode:	N	%	N	%
			0	
Male-to-Male Sex (MSM)	104	44%	N/A <sup>0</sup>	N/A
Injection Drug Use (IDU)	0	<b></b> <sup>6</sup>	0	6
MSM/IDU	6 <sup>6</sup>	3%	N/A	N/A
Heterosexual sex (HTSX)	<b></b> <sup>6</sup>	<b></b> <sup>6</sup>	<sup>6</sup>	6
Other <sup>3</sup>	92	39%	77	56%
Total Undetermined	34	14%	50	36%
Presumed HTSX <sup>4</sup>	N/A	N/A	32	23%
Undetermined <sup>5</sup>	34	14%	18	13%
Total <sup>7</sup>	237	100%	137	100%

Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.  $^2$  N/A = Not Applicable

<sup>&</sup>lt;sup>3</sup>Other includes pediatric and receipt of blood/blood products.

<sup>&</sup>lt;sup>4</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>5</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>6</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>7</sup> Total includes numbers suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 13. Number and percentage distribution of people living with HIV infection on December 31, 2015, 25 years of age and older, sex at birth by race/ethnicity and exposure mode: Massachusetts<sup>1</sup>

	Men		Womer	1
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	7,147	50%	1,384	24%
Black (non-Hispanic)	3,287	23%	2,624	46%
Hispanic/Latino	3,352	24%	1,544	27%
Asian/Pacific Islander	307	2%	81	1%
Other/Unknown	96	1%	52	1%
Exposure Mode:	N	%	N	%
Male-to-Male Sex (MSM)	7,579	53%	N/A <sup>2</sup>	N/A
Injection Drug Use (IDU)	2,329	16%	1,228	22%
MSM/IDU `	695	5%	N/A	N/A
Heterosexual sex (HTSX)	828	6%	1,983	35%
Other <sup>3</sup>	125	1%	95	2%
Total Undetermined	2,633	19%	2,379	42%
Presumed HTSX <sup>4</sup>	N/A	N/A	1,862	33%
<ul> <li>Undetermined<sup>5</sup></li> </ul>	2,633	19%	517	9%
Total	14,189	100%	5,685	100%

Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

N/A = Not Applicable

<sup>&</sup>lt;sup>3</sup>Other includes pediatric and receipt of blood/blood products.

<sup>&</sup>lt;sup>4</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>5</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 14. Number and percentage distribution of people diagnosed with HIV infection between 13-24 years of age, race/ethnicity by exposure mode: Massachusetts<sup>1</sup>, 2012–2014<sup>2</sup>

	White (NH) <sup>3</sup>		Black (	Black (NH)		Hispanic/Latino	
Exposure Mode:	N	%	N	%	N	%	
Male-to-Male Sex (MSM)	67	70%	39	46%	68_	67%	
Injection Drug Use (IDU) MSM/IDU	5 <sup>7</sup>	5%	<sup>7</sup> <sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	
Heterosexual Sex (HTSX)	<b></b> <sup>7</sup>	7	7	8%	<sup>7</sup>		
Other⁴ Total Undetermined	0 18	0% 19%	' 34	' 40%	' 26	' 26%	
Presumed Heterosexual <sup>5</sup>	6	6%	19	22%	7	7%	
Undetermined <sup>6</sup>	12	13%	15	18%	19	19%	
Total <sup>8</sup>	96	100%	85	100%	101	100%	

Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. <sup>3</sup> (NH) = Non-Hispanic

<sup>&</sup>lt;sup>4</sup>Other includes pediatric and receipt of blood/blood products.

<sup>&</sup>lt;sup>5</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>6</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>7</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>8</sup> Total includes numbers suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 15. Number and percentage distribution of people living with HIV infection on December 31, 2015 between 13–24 years of age, race/ethnicity by exposure mode: Massachusetts<sup>1</sup>

	White (NH) <sup>2</sup>		Black (	Black (NH)		Hispanic/Latino	
By Exposure Mode:	N	%	N	%	N	%	
Male-to-Male Sex (MSM) Injection Drug Use (IDU) MSM/IDU Heterosexual Sex (HTSX)	23 <sup>6</sup> <sup>6</sup> <sup>6</sup>	31% <sup>6</sup> <sup>6</sup> <sup>6</sup>	29 <sup>6</sup> <sup>6</sup> <sup>6</sup>	19% <sup>6</sup> <sup>6</sup>	46 <sup>6</sup> <sup>6</sup> <sup>6</sup>	36%	
Other <sup>3</sup>	37	49%	76	49%	51	40%	
Total Undetermined	11	15%	45	29%	26	20%	
<ul> <li>Presumed Heterosexual<sup>4</sup></li> <li>Undetermined<sup>5</sup></li> </ul>	6 6	6 6	21 24	13% 15%	8 18	6% 14%	
Total <sup>7</sup>	75	100%	156	100%	129	100%	

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup>(NH) = Non-Hispanic

<sup>&</sup>lt;sup>3</sup>Other includes pediatric and receipt of blood/blood products.

<sup>&</sup>lt;sup>4</sup> Includes woman having sex with a man of unknown HIV status or risk. This category is limited to women only.

<sup>&</sup>lt;sup>5</sup> Includes man having sex with a woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>6</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>7</sup> Total includes numbers suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 16. Number and percentage distribution of people diagnosed with HIV infection, age at diagnosis by sex at birth and race/ethnicity: Massachusetts<sup>1</sup>, 2012-2014<sup>2</sup>

	13–	19	20-	24	13–		25	+
Sex at Birth:	N	%	N	%	N	%	N	%
Men Women	34 21	62% 38%	198 41	83% 17%	232 62	79% 21%	1,274 452	74% 26%
Race:	N	%	N	%	N	%	N	%
White (NH) <sup>3</sup> Black (NH) Hispanic/Latino API <sup>4</sup> Other/Unk. <sup>5</sup> <b>Total</b> <sup>7</sup>	11 20 19 <sup>6</sup> <sup>6</sup> <b>55</b>	20% 36% 35% <sup>6</sup> <sup>6</sup> 1 <b>00%</b>	85 65 82 <sup>6</sup> <sup>6</sup> <b>239</b>	36% 27% 34% <sup>6</sup> <sup>6</sup> 100%	96 85 101 <sup>6</sup> <sup>6</sup> <b>294</b>	33% 29% 34% <sup>6</sup> <sup>6</sup>	648 522 479 64 13 <b>1,726</b>	38% 30% 28% 4% 1% <b>100%</b>

Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. 

(NH) = Non-Hispanic

<sup>&</sup>lt;sup>4</sup> API = Asian/Pacific Islander

<sup>&</sup>lt;sup>5</sup> Other/Unk. = Other/Unknown; includes American Indian/Alaska Native and unknown race/ethnicity

<sup>&</sup>lt;sup>6</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>7</sup> Total includes numbers suppressed for the assurance of confidentiality.

Table 17. Number and percentage distribution of people living with HIV infection, age on December 31, 2015 by sex at birth and race/ethnicity: Massachusetts<sup>1</sup>

		Αç	ge (years	s) on Dec	ember 3	31, 2015		
	13-1	9	20–2	24	13-2	24	25+	<b>+</b>
Sex at Birth:	N	%	N	%	N	%	N	%
Men Women	43 33	57% 43%	194 104	65% 35%	237 137	63% 37%	14,189 5,685	71% 29%
Race:	N	%	N	%	N	%	N	%
White (NH) <sup>2</sup> Black (NH) Hispanic/Latino API <sup>3</sup>	9 41 23 <sup>5</sup>	12% 54% 30%	66 115 106	22% 39% 36% <sup>5</sup>	75 156 129 <sup>5</sup>	20% 42% 34% <sup>5</sup>	8,531 5,911 4,896 388	43% 30% 25% 2%

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

100%

298

Other/Unk.4

Total<sup>6</sup>

100%

148

19,874

100%

374

1%

100%

<sup>&</sup>lt;sup>2</sup> (NH) = Non-Hispanic

<sup>&</sup>lt;sup>3</sup> API = Asian/Pacific Islander

<sup>&</sup>lt;sup>4</sup> Other/Unk. = Other/Unknown; includes American Indian/Alaska Native and unknown race/ethnicity

<sup>&</sup>lt;sup>5</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>6</sup> Total includes numbers suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 18. Number and percentage distribution of people diagnosed with HIV infection by age at diagnosis and Health Service Region (HSR): Massachusetts<sup>2</sup>, 2012–2014<sup>3</sup>

Age at HIV Diagnosis (vears)

			3			() -	,		
	13-	-19	20-	-24	13-		25	+	Total⁴
HSR	N	%	N	%	N	%	N	%	N
Boston	21	38%	71	30%	92	31%	512	30%	606
Central	6	11%	19	8%	25	9%	120	7%	146
Metro West	<b></b> 6	<sup>6</sup>	22	9%	26	9%	282	16%	310
Northeast	9	16%	41	17%	50	17%	340	20%	392
Southeast	11	20%	31	13%	42	14%	265	15%	307
Western	<sup>6</sup>	<u></u> 6	49	21%	53	18%	188	11%	241
Prison <sup>5</sup>	0	0%	0	0%	0	0%	11	1%	11
Mass. Total	55	100%	239	100%	294	100%	1,726	100%	2,027

Reflects the Health Service Region of a person's residence at the time of report (not necessarily current residence); see Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2006/app5 hrs maps.pdf for configuration of Health Service Regions <sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

<sup>&</sup>lt;sup>3</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999. 

Totals include people diagnosed with HIV infection at less than 13 years of age and suppressed numbers

<sup>&</sup>lt;sup>5</sup> HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility

<sup>&</sup>lt;sup>6</sup> Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

Table 19. Rank of cities/towns<sup>1</sup> in Massachusetts<sup>2</sup> by the highest proportion of HIV infection diagnoses (HIV Dx) among adolescents and young adults (13–24 years old): 2012–2014<sup>3</sup>

Rank	City/Town	Number of HIV Dx among 13– 24 year olds	Percent of Total HIV Dx	
1	Holyoke	8	33%	
2	Lynn	10	20%	
3	Revere	5	19%	
4	Springfield	25	18%	
5	Fall River	5	16%	
6	Boston	85	16%	
	All others	156	13%	
	Massachusetts	294	15%	

<sup>&</sup>lt;sup>1</sup> Among cities/towns with at least 5 people diagnosed with HIV infection at ages 13–24 years within the three year period 2012–2014; reflects the city/town of a person's residence at the time of report (not necessarily current residence). People diagnosed while at a correctional facility are not included.

<sup>&</sup>lt;sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

3 Paffective and AIII/AIDS cases for all years presented that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.
 Numbers less than 5 for populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data are current as of 3/1/16 and may be subject to change

#### **Technical Notes:**

Tables 20–22 include data from the Massachusetts Youth Risk Behavior Survey (YRBS) among students in randomly selected Massachusetts public high schools, and conducted every odd year from 1993 to 2013. This anonymous survey is administered by the Massachusetts Department of Elementary and Secondary Education in collaboration with the Centers for Disease Control and Prevention and focuses on risk behaviors that may affect the health and/or safety of high school students. See http://www.doe.mass.edu/cnp/hprograms/yrbs/ for more information.

### Table 20. Percentage and total number of respondents reporting sexual behaviors to the Youth Risk Behavior Survey: **Massachusetts**

Calendar Year 2013

By Behavior:	Percent of total responding yes to specified question	n <sup>1</sup> (total number of respondents for each question)
Ever had sexual intercourse Sexual intercourse before age 13 4 or more lifetime sexual intercourse partners Sexual intercourse in last 3 months Condom used at last intercourse <sup>2</sup> Alcohol/drugs used at last intercourse <sup>2</sup> Ever been, gotten someone pregnant Ever had sexual contact against their will	38.1% 3.0% 9.3% 27.7% 57.6% 23.5% 2.7% 8.8%	2,516 2,506 2,508 2,510 667 679 2,638 2,679

The number of respondents for each question varies because not all questions are asked of everyone taking the survey and, even when the question is asked, some survey participants do not answer all questions <sup>2</sup> Among youth reporting sexual intercourse in the past three months

Data Source: Massachusetts Department of Elementary and Secondary Education

Table 21. Percentage and total number of Massachusetts Youth Risk Behavior Survey respondents reporting condom use at last sexual intercourse by year and sex at birth: Massachusetts, 1993–2013<sup>1</sup>

Young Men		Young V	Vomen	Total		
Year	%	Total n <sup>2</sup>	%	Total n <sup>2</sup>	%	Total n <sup>2</sup>
1993	57.4%	409	46.7%	462	51.8%	872
1995	59.9%	623	52.0%	626	55.9%	1,253
1997	64.2%	517	50.4%	559	57.0%	1,079
1999	62.6%	589	52.0%	639	57.2%	1,237
2001	61.6%	553	54.9%	582	58.1%	1,139
2003	60.3%	424	57.4%	496	57.4%	922
2005	71.6%	442	59.2%	542	65.0%	986
2007	63.2%	422	59.2%	505	61.1%	929
2009	65.7%	409	50.6%	437	57.5%	849
2011	64.5%	373	51.0%	387	57.7%	761
2013	65.2%	323	50.8%	341	57.6%	667

<sup>&</sup>lt;sup>1</sup> A random sample of high schools is selected for participation each year; data presented do not represent cohorts followed over time

Data Source: Massachusetts Department of Elementary and Secondary Education

Table 22. Percentage and total number of Massachusetts Youth Risk Behavior Survey respondents reporting sexual intercourse (ever) by year and sex at birth: Massachusetts, 1993–2013<sup>1</sup>

	Young	Men	Young \	<b>Nomen</b>	Tot	al
Year	%	Total n <sup>2</sup>	%	Total n <sup>2</sup>	%	Total n <sup>2</sup>
1993	51.4%	1,326	46.0%	1,435	48.7%	2,763
1995	50.3%	1,870	42.8%	1,930	46.5%	3,806
1997	46.8%	1,800	42.4%	1,858	44.7%	3,664
1999	46.4%	1,922	41.8%	2,017	44.1%	3,954
2001	46.3%	1,886	42.3%	1,892	44.3%	3,786
2003	40.8%	1,581	41.1%	1,676	41.0%	3,261
2005	47.9%	1,512	42.9%	1,669	45.4%	3,185
2007	45.2%	1,344	43.7%	1,495	44.4%	2,844
2009	48.0%	1,225	44.6%	1,251	46.4%	2,480
2011	44.7%	1,228	39.4%	1,281	42.0%	2,513
2013	39.4%	1,251	36.5%	1,259	38.1%	2,516

<sup>&</sup>lt;sup>1</sup> A random sample of high schools is selected for participation each year; data presented do not represent cohorts followed over time

Data Source: Massachusetts Department of Elementary and Secondary Education

<sup>&</sup>lt;sup>2</sup>Total N = total number of respondents by sex (unweighted). The number of respondents for each question varies from year to year

<sup>&</sup>lt;sup>2</sup>Total N = total number of respondents by sex (unweighted). The number of respondents for each question varies from year to year